

Patent Claims

1. A communication terminal with a bandwidth expansion device for expansion of a bandwidth of a narrowband speech signal at its low-frequency and/or high-frequency end by synthesis of at least one frequency band on the basis of the narrowband speech signal,
characterized
in that the bandwidth expansion device (5) is connected to a memory (4) in which a reference table is stored, which in each case contains at least one parameter value for the bandwidth expansion for at least two net bit rates of the narrowband speech signal.
2. The communication terminal as claimed in claim 1, characterized
in that the reference table which is stored in the memory (4) takes account, as parameters for bandwidth expansion, of the energy in a synthesized frequency band and of a spectral structure of the synthesized frequency band.
3. A method for expansion of a bandwidth of a narrowband speech signal for a communication terminal, having the following steps:
- a) detection of a net bit rate of the narrowband speech signal of the communication terminal,
 - b) access to a memory (4) which contains a reference table which contains associations between at least two net bit rates and parameter values for bandwidth expansion, in order to determine the at least one parameter value which is suitable for the detected net bit rate,
 - c) expansion of the bandwidth by means of a bandwidth expansion device (5) on the basis of the parameters determined for a current bit rate in step b).

4. The method as claimed in claim 3,
in which the reference table takes account, as
parameters, of the energy of a synthesized frequency
band, and a spectral structure of the synthesized
5 frequency band.

5. The method as claimed in one of claims 3 or 4,
in which the energy in the synthesized frequency band
decreases as the net bit rate decreases.

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6. The method as claimed in one of claims 3 to 5,
in which the spectral structure of the synthesized
frequency band takes account of the probability of
occurrence of artefacts at specific frequencies in the
15 narrowband speech signal.